

DECLARATION FOR PATENT APPLICATION

ATTORNEY'S DOCKET NO.: FORSK 3 0-001 FWC CIP CONT FWC DIV

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name:

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

PRODUCTION OF HUMAN PARATHYROID HORMONE FROM MICROORGANISMS the specification of which☐ is attached hereto☒ was filed on 11/16/94 as United States Application Number or 08/340,664 and was amended on _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119(a)-(d) of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

PRIOR FOREIGN APPLICATION(S)			
COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED
			YES <input type="checkbox"/> NO <input type="checkbox"/>
			YES <input type="checkbox"/> NO <input type="checkbox"/>
			YES <input type="checkbox"/> NO <input type="checkbox"/>

LISTING OF FOREIGN APPLICATIONS CONTINUED ON PAGE 2 HEREOF ☐ YES ☐ NO

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below:

Application Number:

Filing Date:

Application Number:

Filing Date:

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

Application Serial Number: 06/921,684 Filing Date: 10/22/86 Status (patented, pending, abandoned): abandonedApplication Serial Number: 07/393,851 Filing Date: 8/14/89 Status (patented, pending, abandoned): patentedLISTING OF US APPLICATIONS CONTINUED ON PAGE 2 HEREOF: ☒ YES ☐ NO

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Lawrence I. Lerner, Reg. No. 19,516; Sidney David, Reg. No. 22,768; Joseph S. Littenberg, Reg. No. 20,832; Arnold H. Krumholz, Reg. No. 25,428; William L. Mentlik, Reg. No. 27,108; John R. Nelson, Reg. No. 28,573; Roy H. Wegner, Reg. No. 28,350; Stephen B. Goldman, Reg. No. 28,512; Paul H. Kochanski, Reg. No. 29,860; Marcus J. Millet, Reg. No. 28,241; Bruce H. Sales, Reg. No. 32,793; Daniel H. Bobis, Reg. No. 16,684; Peter J. Butch III, Reg. No. 32,203; Keith E. Gilman, Reg. No. 32,137; Robert B. Cohen, Reg. No. 32,768; Arnold B. Dampier, Reg. No. 29,738; Michael H. Teschner, Reg. No. 32,862; Jeffrey S. Dickey, Reg. No. 35,858; Gregory S. Gwirtz, Reg. No. 36,522; Jonathan A. David, Reg. No. 36,494; Shawn P. Foley, Reg. No. 33,071; Lawrence G. Fridman, Reg. No. 31,615.

SEND CORRESPONDENCE TO:
LERNER, DAVID, LITTENBERG,
KRUMHOLZ & MENTLIK
600 South Avenue West
Westfield, New Jersey 07090

DIRECT TELEPHONE CALLS TO:
(name and telephone number)
MICHAEL H. TESCHNER
(908) 654-5000

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor (given name, family name): Kaare M. GantvikInventor's signature Kaare M. Gantvik Date 11/07/95Residence: BREGENEV 3 Citizenship: Norway
Post Office Address: 0875 OsloFull name of second joint inventor, if any (given name, family name) Peter AlestromSecond Inventor's signature Peter Alestrom Date 11/08/95Residence: Bregnev 217 Citizenship: Sweden
Post Office Address: 16-0875 Oslo☒ Additional inventors are being named on separately numbered sheets attached hereto.

PRIOR U.S. APPLICATIONS (continued)

Application Serial Number: 07/404,970 Filing Date: 9/08/89 Status (patented, pending, abandoned): abandoned
Application Serial Number: 07/821,478 Filing Date: 1/15/92 Status (patented, pending, abandoned): abandoned
Application Serial Number: 08/087,471 Filing Date: 7/2/93 Status (patented, pending, abandoned): patented
Application Serial Number: Filing Date: Status (patented, pending, abandoned):
Application Serial Number: Filing Date: Status (patented, pending, abandoned):
Application Serial Number: Filing Date: Status (patented, pending, abandoned):

PRIOR FOREIGN APPLICATION(S)			
COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED
			YES <input type="checkbox"/> NO <input type="checkbox"/>
			YES <input type="checkbox"/> NO <input type="checkbox"/>
			YES <input type="checkbox"/> NO <input type="checkbox"/>
			YES <input type="checkbox"/> NO <input type="checkbox"/>
			YES <input type="checkbox"/> NO <input type="checkbox"/>

Full name of third joint inventor, if any (given name, family name): Tordis Beate Oyen

Third Inventor's signature Tordis Beate Oyen Date 14.12.95

Residence: Stordamveien 33 Citizenship: Norway
Post Office Address: 0671 Oslo,
Norway

Full name of fourth joint inventor, if any (given name, family name): Odd Stokke Gabrielsen

Fourth Inventor's signature Odd Stokke Gabrielsen Date 17.12.95

Residence: Ullernveien 16D Citizenship: Norway
Post Office Address: 0280 Oslo,
Oslo

Full name of fifth joint inventor (given name, family name):

Fifth Inventor's signature _____ Date _____

Residence: _____ Citizenship: _____
Post Office Address: _____

Full name of sixth joint inventor, if any (given name, family name):

Sixth Inventor's signature _____ Date _____

Residence: _____ Citizenship: _____
Post Office Address: _____

Full name of seventh joint inventor, if any (given name, family name):

Seventh Inventor's signature _____ Date _____

Residence: _____ Citizenship: _____
Post Office Address: _____

Full name of eighth joint inventor, if any (given name, family name):

Eighth Inventor's signature _____ Date _____

Residence: _____ Citizenship: _____
Post Office Address: _____



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

JANUARY 08, 1998

PTAS

LERNER, DAVID, ET AL
MICHAEL H. TESCHNER
600 SOUTH AVENUE WEST
WESTFIELD, NJ 07090



100579246A



UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, NORTH TOWER BUILDING, SUITE 10C35, WASHINGTON, D.C. 20231.

RECORDATION DATE: 11/20/1997

REEL/FRAME: 8806/0301
NUMBER OF PAGES: 2

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

GAUTVIK, KAARE M.

DOC DATE: 10/12/1997

ASSIGNOR:

ALESTROM, PETER

DOC DATE: 10/13/1997

ASSIGNEE:

ASTRA AKTIEBOLAG
S-151 85 SODERTALJE, SWEDEN

SERIAL NUMBER: 08340664
PATENT NUMBER:

FILING DATE: 11/16/1994
ISSUE DATE:

SERIAL NUMBER: 08463222
PATENT NUMBER:

FILING DATE: 06/05/1995
ISSUE DATE:

SERIAL NUMBER: 08461436
PATENT NUMBER:

FILING DATE: 06/05/1995
ISSUE DATE:

LDL K&M

JAN 14 1998

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8806/0301 PAGE 2

TONYA LEE, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

RECEIVED



100579246

SHEET

RECEIVED DEPARTMENT OF COMMERCE
Patent and Trademark Office

NOV 20 1997

RECEIPT ACTING DIV.

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Kaare M. Gautvik
Peter Alestrom

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other

Execution Date:

2. Name and address of receiving party(ies)

Name: Astra Aktiebolag
Internal Address:

Street Address: S-151 85 Sodertalje

City: State: Zip:

Country: Sweden

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

08/340,664
08/463,222
08/461,436

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: MICHAEL H. TESCHNER
Internal Address: LERNER, DAVID, LITTENBERG,
KRUMHOLZ & MENTLIK

Street Address: 600 South Avenue West
City: Westfield State: NJ ZIP: 07090

6. Total Number of applications and patents involved: 3

7. Total Fee (37 CFR 3.41).....\$120.00

- ☐ Enclosed
☒ Authorized to be charged to deposit account

8. Deposit account number:

12-1095

11/26/1997 JSHABAZZ 00000015 DA# 121095 08340664
Sale Ref: 00000015 DA# 121095 08340664
01 FC:581 120.00 CH

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

MICHAEL H. TESCHNER

Name of Person Signing

Signature

November 18, 1997

Date

Total number of pages including cover sheet, attachments, and document: 2

A S S I G N M E N T

WHEREAS, KAARE M. GAUTVIK, a citizen of Norway, residing at Bregnevn-3, N-0875 Oslo, Norway; and PETER ALESTROM, a citizen of Sweden, residing at Bregnevn 21A, N-0875 Oslo, Norway, as assignors, have certain inventions disclosed and/or claimed in:

<u>Application No.</u>	<u>Filing Date</u>	<u>Title</u>
08/340,664	November 16, 1994	PRODUCTION OF HUMAN PARATHYROID HORMONE FROM MICROORGANISMS
08/463,222	June 5, 1995	PRODUCTION OF HUMAN PARATHYROID HORMONE FROM MICROORGANISMS
08/461,436	June 5, 1995	PRODUCTION OF HUMAN PARATHYROID HORMONE FROM MICROORGANISMS

AND WHEREAS, ASTRA AKTIEBOLAG, a corporation of Sweden, having a place of business at S-151 85 Sodertalje, SWEDEN, as assignee, is desirous of acquiring all right, title and interest in and to said inventions and any Letters Patent that may be granted therefor.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, we as assignors hereby sell, assign and set over to said assignee the entire right, title and interest for the United States of America and all other countries in and to said invention and the aforesaid application for Letters Patent, all original, divisional, continuation, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries, and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said inventions or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for us and our legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all divisional, continuation, reissue and other applications for Letters Patent on said inventions and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said inventions, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid assignee, its successors, assigns and nominees to obtain patent protection for said inventions in all countries, the expenses incident to said applications to be borne and paid by said assignee.

And we do hereby authorize our attorneys, to insert on this deed the filing date and serial number of said application when known.

10.12.97

Date

Kaare M. Gautvik
KAARE M. GAUTVIK

Wendy Riiser
Witness

WENCHE RIISER
Advokat

10.13.97

Date

Peter Alestrom
PETER ALESTROM

Wendy Riiser
WENCHE RIISER
Advokat

RECORDATION FORM COVER SHEET
PATENTS ONLY

U.S. DEPARTMENT OF COMMERCE

OMB No. 0651-0011 (exp. 4/94)

Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party:

ASTRA AKTIEBOLAG

Additional name(s) of conveying party(ies) attached? No

2. Name and address of receiving party:

Name: ALLELIX BIOPHARMACEUTICALS INC.

Internal Address:

Street Address: 6850 Goreway Drive

City: Mississauga, Ontario, State: Canada ZIP: L4V 1V7



3. Nature of conveyance:

☒ Assignment

☐ Merger

☐ Security Agreement

☐ Change of Name

☐ Other

Execution Date: February 18, 1999

Additional name(s) & address(es) attached? No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

08/463,222, 07/806,271, 08/329,856, 07/239,145,
08/340,664, 08/461,436, 07/630,969

B. Patent No.(s)

5,646,015, 5,382,658, 5,208,041, 5,496,801,
5,223,407, 5,599,792

Additional numbers attached? No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Stephen A. Bent

Internal Address: Suite 500

Street Address: 3000 K Street, N.W.

City: Washington, State: DC ZIP: 20007-5109

6. Total number of applications and patents involved: 13

7. Total fee (37 C.F.R. §3.41). \$520.00

☒ Enclosed

☐ Authorized to be charged to deposit account

8. Deposit account number: 19-0741

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Stephen A. Bent

Name of Person Signing

Reg. No. 29,768


Signature

March 22, 1999

Date

Total number of pages including cover sheet, attachments, and document: 4

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned company:

ASTRA AKTIEBOLAG

having a place of business at

S-151 85 Soderalje
Sweden

owner of the invention rights in the United States of America and its territories and possessions to the below listed U.S. Patent, as evidenced in the Assignment records in the U.S. Patent and Trademark Office, and by these presents hereby sells and assigns, unto:

ALLELIX BIOPHARMACEUTICALS INC.

having an address at

6850 Goreway Drive
Mississauga, Ontario
Canada L4V 1V7

(hereinafter ASSIGNEE) all right, title and interest for United States, its territories and possessions thereof, in and to the inventions and the applications therefor, identified as follows:

<u>PATENT NUMBER</u>	<u>ISSUE DATE</u>	<u>TITLE</u>
H 1606-3 US US 5,646,015	July 8 1997	EXCRETION OF HETEROLOGOUS PROTEINS FROM <i>E. COLI</i>
H 1603-1 US US 5,382,658	January 17, 1995	STABILITY-ENHANCED VARIANTS OF PARATHYROID HORMONE
H 1601-1 US US 5,208,041	May 4, 1993	ESSENTIALLY PURE HUMAN PARATHYROID HORMONE
H 1615-1 US US 5,496,801	May 5, 1996	PARATHYROID HORMONE FORMULATION
H 1606-2 US US 5,223,407	June 29, 1993	EXCRETION OF HETEROLOGOUS PROTEINS FROM <i>E. COLI</i>

US 5,599,792 February 4, 1997

BONE-STIMULATING, NON-
VASOACTIVE PARATHYROID
HORMONE VARIANTS

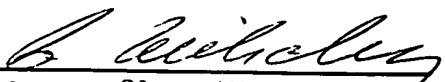
<u>Serial No.</u>	<u>Filing Date</u>	<u>TITLE</u>
H 1604-2 US 08/463,222	June 5, 1995	PRODUCTION OF HUMAN PARATHYROID HORMONE FROM MICTOORGANISMS
H 1602-2 US 07/806,271	December 13, 1991	OXIDATION RESISTANT VARIANTS OF PARATHYROID HORMONE
H 1603-2 US 08/329,856	October 27, 1994	STABILITY ENHANCED VARIANTS OF PARATHYROID HORMONE
H 1606-1 US 07/239,145	August 31, 1988	EXCRETION OF HETEROLOGOUS PROTEIN FROM E. COLI
H 1608-6 US 08/340,664	November 16, 1994	PRODUCTION OF HUMAN PARATHYROID HORMONE FROM MICROORGANISMS
H 1608-7 US 08/461,436	June 5, 1995	PRODUCTION OF HUMAN PARATHYROID HORMONE FROM MICOORGANISMS
H 1602-1 US 07/630,969	December 20, 1990	PARATHYROID HORMONE VARIANTS

including all reissue and extensions of Letters Patent granted for said invention; the Commissioner of Patents and Trademarks of the United States Of America being hereby authorized to transfer said Letters Patent to said Assignee in accordance herewith; this assignment being under covenant, not only that full power to make the same is had by the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right heretofore given, such that the Letters Patent shall be held and enjoyed by said Assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made.

The undersigned hereby grants the firm of FOLEY & LARDNER the power to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

Company:
Astra Aktiebolag
(publ)

Date: 18.02.1999

By: 
Name: p.p. Claes Wilhelmsson
Title: Executive Vice President
Research & Development

Date: 18.02.1999

WITNESS: 

Date: 18.02.1999

WITNESS: 

Note: Prima facie evidence of execution may optionally be obtained by execution of this document before a U.S. Consul or before a local officer authorized to administer oaths whose authority is proved by certificate from a U.S. Consul.